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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| EXAMINER |
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RAHMJOO, MANUCHER

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| ART UNIT | PAPER NUMBER |
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2624

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05/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/057,950 | Applicant(s) MATSUOKA ET AL. | |
| | Examiner Mike Rahmjoo | Art Unit 2624 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-18, 21-23 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-18, 21-23 and 25-27 is/are rejected.
- 7) ☒ Claim(s) 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16- 18 and 21-23,25- 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 16 line 7 recites "...of setting a range to be displayed...". It is unclear if any displaying is done. Use of "...to be..." makes the claim language indefinite.

As per claim 16, lines 8- 9 applicant recites "...in the color distribution...". It is unclear what applicant is referring to as color distribution. Is it the colors of sample points or does the distribution make a reference to some kind of histogram which is different to said sample points.

Claims 21,22-23 have similar rejections.

Claims 17- 18, 25- 27 are indefinite because they depend on indefinite antecedent claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 16- 18 and 21-23, 25- 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Beretta et al (US Patent 5,416,890).

As per claims 16 and 21- 23 and as to the broadest reasonable interpretation by examiner, Beretta teaches a color-distribution-information means for inputting color coordinate values in a second color system corresponding to sample points in a first color system see for example fig. 9 and column 19 lines 20- 25 for RGB into XYZ and LAB values corresponding to sample points in a first color system;

a viewpoint information setting step, of setting viewpoint according to user instructions corresponding to for example fig. 6 and col. 34 lines 10- 20 wherein program instructions (inherently coded by user) and descriptive information are needed to draw the coordinate systems of the color spaces available for display in color space

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window 112 and also fig. 23 which is a flowchart of instructions on trajectory data to draw lines from prior to next coordinate position;

a range setting step, setting a range to be displayed in the color distribution according to user instructions corresponding to for example col. 29 lines 23- 27 wherein user manually adjusts the color signal the perceived lightness or darkness of a color to conceptualize the change as the color changing slices in the color coordinate space and also fig. 33a wherein user moves, lightens or darkens a color by the use of mouse 32 and performs color editing as corresponding to range setting;

a selector to select sample points corresponding to the range (col. 54 line 3 corresponding to range checking) from the sample points in the first color system and obtaining the color coordinate values in the second color system corresponding to the selected sample points corresponding to for example columns 53- 54 wherein color selections and transfers in different color spaces are made and in and out of range messages are issued accordingly;

a generator to generate surface information of the three-dimensional-object based on the obtained color coordinate values in the second color system corresponding to the selected sample points and generating color information of the surface of the three dimensional object based on the obtained color coordinate values in the second color system corresponding to the selected sample points see for example fig.16 a- b for color editing according to the graphical user interface, showing color representation in three- dimensional rectangular and cylindrical coordinate

systems corresponding to generation step and also fig. 26 steps 390- 399
corresponding to generation of surface information;

a display (fig. 1 block 30) to display the three dimensional object corresponding to the viewpoint information based on the surface information of the three dimensional object (corresponding to fig. 32a-b for the solids and also fig. 14 for object colors) and the color information of the surface see for example fig. 32 and column 50 lines 50- 67 for plotting three dimensional solid of reproducible colors in any available color space (corresponding to distribution based on surface information of the three dimensional object along with the outermost boundaries defining the reproducible colors corresponding color information of the surface).

As per claim 17 Beretta teaches the sample points are regularly placed in the form of a grid in the first color system see for example fig. 4,6,7 and 9 for set of values in the form of a grid.

As per claim 18 Beretta teaches range setting step of setting grid ranges for each color component in the first color system see for example column 19 lines 45- 55 wherein the user changes the color space, each of the colors, currently plotted (corresponding to displaying) according to coordinates in one color space (corresponding to first color system) and also fig. 33a wherein user moves, lightens or darkens a color by the use of mouse 32 and performs color editing as corresponding to range setting.

As per claim 24 Beretta teaches the surface information includes a display mode (for example column 50 lines 56 as corresponding to plotting 3D solids), the number of

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surfaces (see fig. 32a for the surfaces of the three dimensional solid) and a plurality of compositional data corresponding to for example fig. 32a and the colors measured through a colorimeter.

As per claim 25 Beretta teaches the display step performs pseudo- three dimensional display of the three dimensional object of the color distribution corresponding to for example fig. 3 wherein Color editing client software 12 contains the software Instructions for defining and implementing the color editing functions available to the user, for defining the color spaces and gamuts in which color editing takes place, and for directing processor 22 to perform transformations on color information signals and color spaces.

As per claim 26 Beretta teaches said range setting step sets an internal layer to be displayed corresponding to for example fig. 32b and column 50 lines 60- 68 to column 51 lines 1- 2 wherein 3 D solid is displayed in a suitable range of colors at equal L* intervals in slices (corresponding to layers).

Allowable Subject Matter

Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 05/21/2007 have been fully considered but they are not persuasive.

As per applicant's remarks on pages 10 applicant argues "Beretta is not understood to teach or suggest, among other features, setting a range to be displayed in the color distribution and selecting sample points corresponding to the range from sample points in a first color system and obtaining color coordinate values in a second color system corresponding to the selected sample points. Beretta thus also fails to teach or suggest generating surface information of the three-dimensional object based on the obtained color coordinate values in the second color system corresponding to the selected sample points and generating color information based on the obtained color coordinate values and the second color system corresponding to the selected sample points".

Examiner respectfully disagrees.

Beretta teaches a range setting step, setting a range to be displayed in the color distribution according to user instructions corresponding to for example col. 29 lines 23- 27 wherein user manually adjusts the color signal the perceived lightness or darkness of a color to conceptualize the change as the color changing slices in the color coordinate space and also fig. 33a wherein user moves, lightens or darkens a color by the use of mouse 32 and performs color editing as corresponding to range setting. Figure 9 also corresponds to the color distribution in color space 130 as claimed.

Beretta also teaches a selector to select sample points corresponding to said range (col. 54 line 3 corresponding to range checking) from the sample points in the first color system and obtaining the color coordinate values in the second color system corresponding to said selected sample points corresponding to for example columns 53- 54 wherein color selections and transfers in different color spaces are made and in and out of range messages are issued accordingly.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

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Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Rahmjoo whose telephone number is 571-272-7789. The examiner can normally be reached on 8 AM- 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Rahmjoo

February 7, 2007



MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
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